Headquarters
US Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
16 December 2004

Training

ARMOR CENTER TRAINING DEVELOPMENT GUIDE

Summary. This regulation is a guide for Fort Knox users and discusses the Armor Center's training development processes, products, and programs. The goal is to develop outstanding, standardized training products and programs that support an Army undergoing rapid change while at war. Appendix B, Training Development Functions Matrix, summarizes the responsibilities of each Armor Center organization.

Applicability. This regulation applies to all Armor Center personnel involved in developing Armor and Cavalry training for the Total Force.

Suggested improvements. The proponent of this regulation is Directorate of Training, Doctrine, and Combat Development (DTDCD). Users are invited to send comments and suggested improvements on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, U.S. Army Armor Center (USAARMC) and Fort Knox (ATZK-TDT), Fort Knox, KY 40121-5000.

Table of Contents

	Paragraph	Page
Chapter 1. General Information	1-1	1-1
Chapter 2. Task Analysis	2-1	2-1
Chapter 3. Training Requirements Analysis System (TRAS)		
Documentation	3-1	3-1
Chapter 4. Development of New Courses	4-1	4-1
Chapter 5. Changes to Existing Courses	5-1	5-1
Chapter 6. Advanced Distributive Learning (ADL)	6-1	6-1
Chapter 7. Resource Management for Institutional Training	7-1	7-1
Chapter 8. Training Content Standardization	8-1	8-1
Chapter 9. Integration of Lessons Learned	9-1	9-1
Chapter 10. Training Strategies	10-1	10-1
Chapter 11. System Training Plans (STRAP)	11-1	11-1
Chapter 12. Standards in Training Commission (STRAC)	12-1	12-1
Chapter 13. Training Aids, Devices, Simulators, and Simulations		
(TADSS)	13-1	13-1

Table of Contents (Cont.)

Chapter 14. Training Development Support for Operational	14-1	14-1
Testing		
Chapter 15. Unit Training	15-1	15-1
Chapter 16. Training Development Automation	16-1	16-1
Chapter 17. Training Development Clearinghouse	17-1	17-1
Chapter 18. Training Developer Education	18-1	18-1
Appendix A- References		A-1
Appendix B - Training Development Functions Matrix		B-1
Appendix C - TRAS Process		C-1
Appendix D - Development of a New Course		D-1
Appendix E - Sample Memorandum of Agreement for Course		E-1
Development/Revision		
Appendix F - Sample Course Design Blueprint		F-1
Appendix G - Structure of Training Programs Branch		G-1
Appendix H - Institutional Training Management Board (ITMB)		H-1
Process		
Appendix I - Pre-ITMB Slide Template		I-1
Appendix J – Acronyms		J-1

Chapter 1 General Information

- 1-1. Purpose. This regulation is a guide for Fort Knox users and discusses the Armor Center's training development processes, products, and programs. The goal is to develop outstanding, standardized training products and programs that support an Army undergoing rapid change while at war.
- 1-2. Scope. Training development is a complex, multifaceted process that impacts the Total Force and supports the three pillars of unit training, institutional training, and self-development. It encompasses a wide range of training products, such as ARTEP mission training plans (MTPs), resident and nonresident courses, Combined Arms Training Strategies (CATS), Advanced Distributed Learning (ADL) courseware, and training aids, devices, simulators, and simulations (TADSS). Many of these products are interrelated so that a change in one requires a change in another. The training development process must be managed closely so that products are developed and revised through a coordinated effort across the Armor Center and with other agencies in the U.S. Army Training and Doctrine Command (TRADOC).
- 1-3. References. Required and referenced publications are listed in Appendix A.
- 1-4. Explanation of Acronyms. Acronyms used in this regulation are explained in Appendix J.
- **1-5. Responsibilities.** Appendix B, Training Development Functions Matrix, summarizes the responsibilities of each Armor Center organization.

Chapter 2 Task Analysis

2-1. Armor Master Task List.

- a. All task-related Armor Center training products must be based on the Commandant-approved Armor Master Task List. The Master Task List contains all Armor-proponent, shared, and common tasks for Career Management Field 19, Branch Code 19, and Armor and Reconnaissance units. The Master Task List is stored in the Automated Systems Approach to Training (ASAT) database [which may be subsumed into the Army Training Information Architecture (ATIA)]. The Directorate of Training, Doctrine, and Combat Development (DTDCD) has the lead on task analysis and is responsible for:
 - (1) Identifying new collective and individual tasks.
- (2) Developing/revising task analysis data (e.g., task conditions, standards, steps, and reference) in ASAT/ATIA. The task data comprise the task summaries in the Armor-proponent Soldier's Manuals and the training & evaluation outlines (TEOs) in the ARTEP MTPs.
- (3) Developing collective task to individual task crosswalks. These crosswalks are published in the ARTEP MTPs.
- (4) Coordinating with other proponents schools and integrating centers on task analysis issues.
 - (5) Chairing Armor-proponent task review boards.
 - (6) Participating as the Armor Center representative on other task selection boards.
- (7) Producing task-based training literature (e.g., Soldier training publications, ARTEP MTPs).
 - (8) Maintaining an audit trail of all Master Task List changes.
- b. Changes to the Armor Master Task List. Any organization can recommend changes additions/deletions to the Master Task List or content changes to specific tasks. All recommendations must be submitted with supporting rationale (e.g., doctrinal changes and approved lesson learned) through the unit's chain of command to DTDCD. Task analysis changes are made continuously to reflect doctrine, organizations, training, leader development, materiel, personnel and facilities (DOTLMPF) changes. The DTDCD director approves additions/deletions to the Master Task List. DTDCD sends the Master Task List to the Commanding General (CG) annually for his approval.

2-2. Task Review Boards.

- a. Task Review Boards are held every 12-18 months for major MOSs and skill levels. The Director, DTDCD, or his appointed representative, chairs the boards.
- b. The purpose of the Task Review Boards is to recommend additions, changes, and deletions to the Master Task List and to prioritize tasks for training. The Task Review Boards should include representatives from U.S. Army Forces Command (FORSCOM), combat training centers (CTC), National Guard Bureau (NGB) or U.S. Army Reserve Command (USARC), other proponents, and the Armor Center. The Armor Center's voting member is a representative from 16th Cavalry Regiment (officer tasks), Noncommissioned Officer Academy (NCOA) (skill levels 2, 3, and 4), or 1st Armor Training Brigade (1st ATB) (skill level 1). DTDCD sends Task Review Board results to all board members.

Chapter 3

Training Requirements Analysis System (TRAS) Documentation

- 3-1. Individual Training Plan (ITP). The ITP is a long-range planning document that outlines the resident/nonresident training strategy for an occupational specialty. projections of institutional training resources, such as estimated dollar, ammunition, facility, and equipment/device requirements not currently available [e.g., not on the table of distribution and allowances (TDA), not included in the Command Operating Budget, etc.]. required by regulation, the Armor Center will also include a task-to-course crosswalk as an appendix to the ITP. This crosswalk shows where active and proposed tasks will be taught in current and future Armor-proponent courses. An ITP should be submitted 5 years before the implementation fiscal year (FY) of new or revised training in order to align the resource information with the Planning, Programming, Budgeting, and Execution System (PPBES) budget formulation process. However, in reality, ITPs must be maintained continuously in order to reflect proposed DTLOMPF changes. The Armor Center is responsible for developing ITPs for military occupational specialty (MOS) 19K, 19D, and 19A. DTDCD has the lead for ITP revisions. It updates ITPs throughout the year and seeks CG approval on an annual basis by first quarter of the FY. Before submitting to the CG, DTDCD staffs revised ITPs through 16th Cavalry Regiment; NCOA; 1st ATB; G4/Directorate of Resource Management (DRM); Directorate of Plans, Training, Mobilization, and Security (DPTMS); and the Cavalry and Armor Proponency Office (CAPO) for concurrence. Once approved by the CG, DTDCD forwards the approved ITPs to Deputy Chief of Staff for Operations and Training (DCSOPS&T), NGB, and USARC. See Appendix C, Training Requirements Analysis System (TRAS) Process, for more information about the ITP and the other TRAS documents.
- **3-2.** Course Administrative Data (CAD). The CAD provides the basis for solicitation of individual training requirements (student input) through the Total Army Centralized Individual Training Solicitation (TACITS) for new and revised courses for use during the HQDA Structured Manning Decision Review (SMDR) and the development of the Army Program for Individual Training (ARPRINT). It contains critical information, such as the instructor contact hours (ICHs), optimum class size, course length, course start date, projected student input and DSTE. A CAD is submitted 3 years before the implementation FY of new or revised training in order for course data to be recognized during the HQDA SMDR and TRADOC Review of Manpower (TRM). CADs must be submitted to DCSOPS&T by the deadlines below:
- a. CADs for new courses or courses that have a change in prerequisites, which require a Total Army Centralized Individual Training Survey (TACITS), must be submitted in February.
- b. CAD revisions for existing courses must be submitted in June, as required by the SMDR timelines.
- c. CAD revisions requiring additional resources must be processed through the Institutional Training Management Board (see Chapter 5, Changes to Existing Courses) and approved by

- the CG. Once that is done, units contract with DTDCD to develop and staff the CADs through G4/DRM, DPTMS, and CAPO for concurrence. DTDCD forwards the completed CAD through the unit commander to the CG at least 2 weeks before the February or June submission deadline. After CG approval, DTDCD forwards the CADs to DCSOPS&T, NGB, and USARC. A proponent's approval does not obligate TRADOC to resource the program. DTDCD is responsible for tracking CADs until approved by TRADOC.
- 3-3. Program of Instruction (POI). The POI provides a general description of course (or phase) content (to include the collective and individual tasks), duration of instruction, methods of instruction, and resources required to conduct one iteration of peacetime and mobilization training. A POI is submitted a minimum of 6 months before implementation date if there are no new resources. POIs requiring resource changes must be developed and submitted at the earliest opportunity in order to impact the resourcing system. POI revisions requiring additional resources or a change in tasks taught must be processed through the ITMB and approved by the CG. They then go into the appropriate resourcing channels which can take more than 5 years to produce the required resources. Once the CG has approved development of a new course or revision of an existing one, units contract with DTDCD to develop and staff the POI through G4/DRM, DPTMS, and CAPO for concurrence. TATS course POIs must be coordinated through the Special Assistant to the CG (SACG) with the NGB and USARC before proponent command approval and submission to headquarters (HQ) TRADOC. Once all lesson plans have been completed in ASAT or ATIA, a final POI is generated from the database. DTDCD forwards the completed POI through the unit commander to the CG. After CG approval, DTDCD forwards the POIs to DCSOPS&T, NGB, and USARC. A proponent's approval does not obligate TRADOC to resource the program. DTDCD is responsible for tracking POIs until approved by TRADOC.
- **3-4. Training and Doctrine Development (TD2).** The TD2 is a module of the Institutional Training Resource Model which captures projected training and doctrine development workload through the POM years. DTDCD is the lead in working with 16th Cavalry Regiment, NCOA, 1st ATB, and CAPO to projecting workload for Armor Center training programs and products. Workload projections, based on TRADOC's estimated time values (ETVs), must capture all training development work across the installation associated with each product. DTDCD consolidates all TD2 input and resolve any discrepancies. It then submits the data to DCSOPS&T. Training development manpower resources not captured in TD2 will not be resourced.

Chapter 4 Development of New Courses

- 4-1. **Overview.** The majority of the Armor Center's course development work consists of changes to existing courses (see Chapter 5, Changes to Existing Courses). However, new courses are occasionally developed in response to major DOTLMPF changes like a new vehicle (e.g., Recon Vehicle Crewman Course) or a training deficiency (e.g., Scout Leader's Course). A unit (16th Cavalry, NCOA, or 1st ATB) or higher headquarters can propose development of a course. New course development should begin 5 years before the implementation date. This lead time can be shortened to 3 years, but that's the minimum required to develop the course materials, acquire the necessary resources, train cadre, and schedule facilities. See Appendix D, Development Process for a New Course.
- **4-2.** Course Concept. The unit responsible for the course works with DTDCD to develop a concept that specifies the following:
- a. Purpose. What tasks will the course train? Why is the course required? What is the scope of the course?
- b. Target audience. What are the MOS and skill level(s) for students in the course? How many students will enroll annually?
- c. Prerequisites. What course(s) must students complete before enrolling in the new course?
- d. Course strategy. Will the courses be divided in phases taught at different locations (e.g., part web-based instruction, part resident instruction)? Will the course be tracked (e.g., all students complete common lessons and then branch off to different vehicle-unique lessons)? Will the instruction focus on field training or emphasize simulation-based training exercises?
- e. Course length. How many days will the course be? What is average length of a course day? Will classes be conducted on weekends?
 - f. Tentative course development timelines, to include:
 - (1) Update to ITP.
 - (2) CAD submission to DCSOPS&T, TRADOC.
 - (3) Lesson plan and test development.
 - (4) POI submission to DCSOPS&T.

- (5) Master Training Schedule submission to the DPTMS.
- (6) Course pilot dates.
- (7) Course start date.

Much of this information will feed into the CAD for the new course. Minimal information may be available in some cases (e.g., the course is vehicle-based and the vehicle is still being designed). It may be necessary to develop the concept based on similar, existing courses.

- **4-3.** Commanding General (CG) Approval. The unit and DTDCD staff the course concept briefing to DPTMS, G4/DRM, CAPO, and the SACG. After incorporating appropriate feedback, the unit conducts a decision brief to the CG, with DPTMS, G4/DRM, CAPO, SACG, and DTDCD in attendance. If the CG approves the course concept, then the unit "contracts" with DTDCD to develop the course materials.
- **4-4.** The "Contract" between the Unit and DTDCD. This contract is a Memorandum of Agreement between the unit commander and the DTDCD director (see example in Appendix E). It describes in depth:
- a. What the CG has approved to be developed/revised (e.g., the specific lesson plans, tests, CADs, POIs, etc.).
- b. How instruction will be designed. The contract includes a "course design blueprint" developed by the unit and DTDCD (see example in Appendix F). The course design blueprint specifies for each lesson
 - (1) Tasks taught from the Master Task List.
 - (2) Instructional methods and environment.
 - (3) Evaluation methods for practical exercises and test.
- c. Who will develop the products, by name, for DTDCD. Baseline teams have been established to perform training development work for each unit (see Appendix G). For example, there is a 16th Cavalry Team with training developers assigned by name that focuses on 16th Cavalry courses. This will ensure course development continuity over time. The number of training developers assigned per unit is based on command priorities and the number and size of the POIs. Due to fluctuations in training development priorities and workload, it may be necessary to task organize and shift personnel between the teams for limited periods. However, every attempt will be made to keep the training developers in a team together.

- d. Who will work on the project, by name, for the unit. The unit point of contact (POC) must come empowered as the authority to coordinate SME reviews in a timely fashion. In some cases, it may be necessary for one or more unit SMEs to work hand-in-hand with the training developers.
- e. Other agencies [e.g., CAPO, SACG, G4/DRM, DPTMS, G6, and Armor Branch Safety Office (ABSO)] are required to provide input to the course revisions as part of a matrix team.
- f. Interim and final milestones. Each project must have a completion date. This date can only be extended through a change to the memorandum of agreement (MOA) agreed to by the unit commander and DTDCD director. The contract also specifies all interim milestones, to include coordination meetings, formal IPRs, and draft submissions.
 - g. The MOA requires that all training materials be developed in ASAT/ATIA.
- **4-5. Training Development Manpower.** DTDCD training developers are devoted fully to one project at a time. DTDCD estimates required manpower using TRADOC's approved ETVs. For example, the ETV for developing a "training course" is 15 man-hours per POI hour. Therefore, the "cost" of developing twelve lesson plans totaling 40 hours would be 600 man-hours or one person for about 4 months. Manpower data is tracked so this figure can be increased or decreased over time to more accurately reflect the requirements.
- **4-6. Update the ITP.** DTDCD will update the ITP to reflect projected institutional training resources related to the new course (e.g., estimated dollar, ammunition, facility, and equipment/device requirements). The resource projections need to be as accurate as possible, since, in some cases, they will impact equipment production decisions. Vehicle requirements should also specify the associated items of equipment (ASIOE) required for instruction. ITP changes will be consolidated annually and submitted to the CG for his approval (see Chapter 3, TRAS Documentation).
- **4-7. Develop the CAD.** DTDCD, working with the unit, develops the CAD (see Chapter 3, TRAS Documentation). CADs for new courses require a TACITS and must be submitted to DCSOPS&T in February, 3 years before the course implementation date.
- **4-8.** Review of Task Analysis. Before lesson plan development, the training developers review task analysis data, new equipment training (NET) materials, lessons learned, field surveys, etc. For vehicle-based courses, valid task analysis data may be unavailable until prototype vehicles and draft technical documentation have been developed by the contractor.
- **4-9. Develop the Course Materials.** DTDCD will develop the lesson plans, supporting materials, test administration guide, tests, and a course lesson sequence summary using spiral

development and with input from the unit subject matter experts (SMEs) and other matrix team members, as appropriate. In-progress reviews (IPRs) will be conducted between the unit commander and DTDCD throughout the course development process. As part of developing/revising institutional training materials, the DTDCD training developers are responsible for staffing all materials for review with DPTMS, ABSO, DTDCD, SACG, and CAPO. Once all training materials have been staffed, they are forwarded, with all feedback attached, by the unit POC to the unit commander for his approval. DTDCD maintains all audit files for a course.

- **4-10. Develop the POI.** The majority of the POI, to include the lesson titles, tasks taught, and resources, already reside in the ASAT/ATIA database once the lesson plans have been completed. In addition, though, DTDCD develops the cover page, preface page, memorandum of transmittal, and, for ADL courseware, the Distance Learning Questionnaire. The staffing and approval process for POIs is addressed in Chapter 3, TRAS Documentation.
- **4-11.** Develop the Course Management Plan (CMP) for Exported Resident Courses. DTDCD develops a CMP for exported courses, such as those taught in The Army School System (TASS) Battalions. The CMP includes:
 - a. Course structure (derived from the POI).
 - b. Course map (derived from the Course Lesson Sequence Summary).
 - c. Training sequence.
 - d. Course manager qualification.
 - e. Course manager guidance.
 - f. Instructor certification requirements.
 - g. Student guidance.
 - h. Test administration guidance.
 - i. Required references.
 - j. Trainer guidance.
- 4-12. Schedule the Pilots. The unit responsible for the course can schedule up to three pilots. Pilot dates for resident courses are submitted to DTDCD 3 months before the first pilot. DTDCD enters the pilots into the Army Training Requirements and Resources System (ATRRS) and notifies DCSOPS&T to tell the field. Pilot dates for a course's ADL phases are submitted to

DTDCD 6 months before the first pilot. In some cases, pilots may not be scheduled sequentially in order to provide sufficient time to make course revisions between the pilots.

- 4-13. Submit the DA Forms 4610-R. The units submit DA Forms 4610-R (Equipment Changes to MTOE/TDA) to G4/DRM for increases to unit owned equipment requirements and authorizations. G4/DRM will process and submit the validated request to Deputy Chief of Staff for Resource Management (DCSRM), as applicable. For equipment requirements and authorizations that G4/DRM owns, the units will provide necessary information for G4/DRM to develop and submit requests to DCSRM. If the equipment will not be available in time, an "in lieu of" item will be identified by the unit, course materials will specify that the task will not be trained to standard, or the task will not be trained until the equipment is available.
- **4-14. Develop the Master Training Schedule.** The units enter the course's Master Training Schedule in the Resource and Training Scheduling System (RATSS) or future scheduling systems. The Master Training Schedule should be based on the POI and the Course Lesson Sequence Summary. If requested by the unit, DPTMS, or G4/DRM, DTDCD will review the Master Training Schedule to ensure it matches the POI.
- 4-15. Plan and Conduct the Pilots. Before the pilot, the unit, CAPO, and DTDCD develop a validation plan that describes how data will be collected (e.g., interviews, student/instructor surveys, observation, test item analysis, etc.). During the pilot, CAPO evaluates the effectiveness and efficiency of the instruction and course materials. After the pilot, CAPO distributes the results of its assessment to the unit and DTDCD. Those results form the basis for recommended course revisions to be completed before the next pilot. Once all pilots are complete, DTDCD will ensure all revisions have been captured in the lesson plans, POI, and ITP.

Chapter 5 Changes to Existing Courses

- 5-1. Types of Course Changes. Changes to courses are categorized as "routine" or "major." A major change is one that impacts resources (equipment, instructor contact hours, facilities, DSTE, funding, etc.) or changes the tasks taught in a course. All major changes must be processed through the Institutional Training Management Board. A routine change is one that corrects a lesson plan or task summary. Corrections may include additional safety information, updating of references, doctrinal fixes, software changes, etc. that do not impact resources or tasks taught.
- **5-2. Routine Changes.** 16th Cavalry Regiment, NCOA, and 1st ATB have access in the ASAT/ATIA database to make routine changes to their lesson plans. Each unit may identify one individual per course, who will be given full access to all of that course's lesson plans in ASAT/ATIA. The rationale for identifying one individual per course is to minimize unintentional changes to the database. Additionally, the complexity of the ASAT/ATIA database, and the skill decay associated with using it infrequently, necessitate identifying only one person per course. DTDCD monitors database changes periodically to minimize unintentional data corruption. However, each unit remains accountable for changes it makes to the database. Units may still submit routine changes to DTDCD, who will process them when not working on major course changes.
- **5-3. Major Changes.** Major changes to courses are managed through the ITMB process, which consists of: the Pre-ITMB brief to the CG; the ITMB meeting; and a decision briefing to the CG of the ITMB's recommendations. The ITMB process occurs on a quarterly basis or as needed. Appendix H, Institutional Training Management Board (ITMB) Process, shows a graphical summary of the ITMB steps.
- a. The Pre-ITMB is where unit commanders and directors propose institutional training changes to the CG. The purpose is to gain initial guidance from the CG (e.g., if he does not support a proposed POI change, then it's unnecessary for the ITMB to discuss it). It is not intended to discuss issues in depth; it is not a replacement for the ITMB. DTDCD sets up the Pre-ITMB Brief. If scheduling conflicts delay the Pre-ITMB for an extended period, then ITMB members send their proposals via-email to the CG.
- b. The ITMB convenes approximately four weeks after the Pre-ITMB in order to provide the Armor Center staff time to analyze the proposed changes. The ITMB consists of voting representatives from 1st ATB, 16th Cavalry Regiment, NCOA, SACG, Quality Assurance Office (CAPO), DTDCD, G4/DRM, and DPTMS. Nonvoting members are the Armor Branch Safety Office (ABSO) and the G6. The Chief, Training Development Division, DTDCD, chairs the ITMB and, after each board meeting, prepares a results memorandum to be staffed with all ITMB members before forwarding to the CG. Each ITMB member has one vote and decisions require a majority. Members may not abstain from voting. The chairman does not vote; split decisions are recorded as such.

c. Within 30 days of the ITMB, DTDCD sets up a decision briefing to the CG. All ITMB members and the unit commanders are present at the decision briefing. If the CG disapproves an ITMB recommendation, then the Armor Center staff may assist the submitting organization in making any changes required to obtain the CG's approval. If the CG approves an ITMB recommendation, then the unit responsible for the course "contracts" with DTDCD to jointly develop or revise the appropriate training material. DTDCD is responsible for tracking ITMB actions and reporting their status to the CG.

Chapter 6 Advanced Distributive Learning (ADL)

- **6-1. Overview.** ADL is defined as interactive, computer-based training that may be led by an instructor (synchronous) or be completely self-paced without an active instructor (asynchronous). Major changes to ADL courseware for Armor-proponent courses are processed through the ITMB. Unit POCs (the same ones authorized to make routine changes in ASAT) submit routine ADL changes to DTDCD for execution.
- **6-2. ADL Course Strategy.** If the ADL is part of a multi-phased course, then DTDCD, the units, and CAPO must ensure the non-ADL phases are revised (if necessary) as part of an overall course strategy. If the ADL is part of a TATS course, then the resident course content needs to be stabilized during the period of performance or resident course changes need to be made in conjunction with the ADL work. This will ensure a relevant ADL product at the end of the contract.
- **6-3. ADL Course Development Priority List.** DTDCD develops the ADL course development priority list, which is submitted to the Army Training Support Center annually for potential funding. The ADL course development priority list is staffed through 16th Cavalry Regiment, NCOA, 1st ATB, G6, and CAPO before forwarding to the CG for his approval.
- **6-4. ADL Contractual Work.** DTDCD is responsible for writing statements of work (SOWs), coordinating source selection boards, and managing contractual work for ADL programs. Unit commanders, or their representatives, must approve the statement of work (SOW) for their courses. A unit representative, as well as the G6, may serve on source selection boards for all contracts involving their courses. DTDCD serves as the Contracting Office Representative (COR) or Contracting Office Technical Representative (COTR) for all ADL contracts. The COR approves contractual work based on content acceptance by the appropriate unit commander and ADL design feedback from DTDCD, CAPO, and G6.
- **6-5. G6 ADL Responsibilities.** The G6 is responsible for:
 - a. Uploading the courseware to the appropriate servers.
 - b. Delivering courseware to students.
 - c. Resolving technical problems with courseware delivery.

Chapter 7

Resource Management for Institutional Training

7-1. Working Through "Stovepipes." Currently, there is no single training resource model for institutional training. Instead, resources are acquired through coordination with a variety of TRADOC and DA agencies. This fragmentary approach creates "stovepipes" that make institutional training resource management extremely difficult. This section describes the impacts of the various resource documents and events, many of which are described in more depth elsewhere in this regulation. See Appendix C for illustrations that graphically depict how the key resource processes relate to each other.

7-2. Long-Range Resourcing (5 years or more before execution).

- a. Individual Training Plan (ITP) (see Paragraph 3-1). In addition to describing the long-range training strategy for an occupational specialty, the ITP contains the complete individual training requirements (resident and nonresident) for a given MOS. The ITP initiates acquisition actions to support training development and execution and feeds into the institutional training resource model (ITRM). For example, to ensure that sufficient new vehicles are available for a course, vehicle projections need to be included in the ITP and input into ITRM. DTDCD develops and updates ITPs.
- b. TADSS Capability Development Document (CDD). If the training strategy in a STRAP includes a recommendation for a new TADSS, then a CDD must be developed to define the TADSS's objective and threshold requirements. Given the timeline required to get the CDD approved by the DA G3 and the TADSS resourced and produced, it is critical to determine the need early in the training development process. DTDCD develops CDDs for new TADSS.
- c. Standards in Training Commission (STRAC) (see Chapter 12). The STRAC committee determines the quantities and type of munitions essential for Soldiers, crews, and units to attain and sustain weapon proficiency. STRAC includes training ammunition requirements for both unit and institutional training. The STRAC Council of Colonels (COC) is a working group comprised of representatives from each proponent school, all MACOMs, and DA. The Council of Colonels reviews issues identified during working groups, determines possible solutions, and prepares recommendations for the Training and Leader General Officer Steering Committee (TLGOSC) for issues that cannot be resolved or approved by the Council. STRAC ammunition requirements are identified 6 years out, to align with the program objective memorandum (POM) cycle. DTDCD is the STRAC lead for the Armor Center.
- d. Program Objective Memorandum (POM). The POM submission is a 6-year outlook on budget requirements and occurs every 2 years. POM submissions can be adjusted through a "mini-POM," which covers 5 years. For example, if the POM was for FY04-10, then the mini-POM would cover FY05-10. ITRM feeds training requirements into the POM. Training requirements submitted outside of the POM cycle are unfunded requirements (UFRs), which are very difficult to get approved.

7-3. Short-Range Resourcing (3-5 years prior execution).

- a. Course Administrative Data (see Paragraph 3-2). The CAD is submitted 3 years before the implementation FY of new or revised training in order for course data to be recognized during the HQDA SMDR and TRADOC TRM. DTDCD and the units develop and update CADs. The CAD provides the:
- (1) Basis for solicitation of individual training requirements (student input) through the TACITS for new and revised courses for use during the SMDR and the development of the ARPRINT.
- (2) Estimated course data elements [optimum class size (OCS), instructor contact hours (ICHs), etc.] used to determine instructor requirements during the SMDR. These requirements will impact the TDA.
 - (3) Revisions to a course file in the ATRRS data base.
- b. Structured Manning Decision Review (SMDR). The SMDR is an annual individual training requirement determination and confirmation process chaired by HQDA [DCSOPS&T and Deputy Chief of Staff for Personnel (DCSPER)]. It is conducted during October-November each year. It compares the total Army training requirements, on a by-course basis, for a given fiscal year, against the training capability of the appropriate TRADOC school. The SMDR also establishes training requirements for the third POM year, validates the SMDR program for the second POM year, and fine-tunes the program for first POM year. Execution year changes are not addressed at the SMDR. Training Resources Arbitration Panel (TRAP) documents execution year changes. DCSRM uses results of the SMDR, as documented in the Army Training Requirements and Resources System (ATRRS), to determine manpower requirements for instructors, direct support to the training event (DSTE), and training structure at the company level. Student and training input are the source for instructor and mission support requirements. These figures also represent a portion of the installation population used for determining Base After each SMDR, during the TRADOC Review of Manpower, Operations manpower. Modernization and Functional Automation Division (MFAD) validates the accuracy of data in the Army Training Requirements and Resources System (ATRRS). Validation process includes verification of constraints, training input numbers, and manpower computations. G4/DRM and MFAD apply the staffing models to determine manpower requirements for the first POM year which is then documented on the TDAs. DTDCD and G4/DRM attend the SMDR for the Armor Center.

7-4. Near-Term Resourcing (6-12 months before execution).

a. Program of Instruction (POI). The POI is the most complete institutional training resource document. Even though a POI can be submitted within 6 months of course implementation, resource requirements must be submitted at the earliest opportunity in order to impact the resourcing system. The Army is currently developing an automated system in which

ITRM will access POI resource requirements using the Army Training Information Architecture (ATIA) (see Chapter 16, Training Development Automation).

b. DA Form 4610-R (see Paragraphs 4-13 and 11-4). The DA Form 4610-R is used to gain approval to establish or modify equipment requirements and authorizations required by the POI to teach the course. Approved changes are documented by G4/DRM on the TDA during the next Command Plan cycle. Once documented, equipment can be requisitioned by the "owning organization" 365 days before the effective date of the TDA on which it appears.

Chapter 8 Training Content Standardization

- **8-1.** Identifying Training Disconnects. DTDCD is the lead agency for identifying potential training content disconnects across courses. For example, the same task trained/tested in one station unit training (OSUT) and the Armor Officer Basic (AOB) Course should be trained/tested in a similar manner (any variation due the differences between students). Additionally, there should be a logical progression in tasks trained from lower to higher skill level courses. For example, tasks trained in unit MTPs should be supported by tasks trained in Armor Captain's Career Course (ACCC) which should be supported by tasks trained in AOB. DTDCD routinely reviews lesson plans and writes reports identifying potential disconnects. These reports are provided the unit commanders for their information and action on a quarterly basis.
- **8-2.** The Task-to-Course Crosswalk. DTDCD produces the task-to-course crosswalk by generating a matrix report from ASAT/ATIA that shows each task on the Master Task List and the course(s) where it's taught. The task/course linkages are created in the ASAT/ATIA database when the lesson plan is developed. The task-to-course crosswalk is reviewed by units quarterly to identify disconnects requiring corrections through ITMB actions. DTDCD develops collective-to-individual task crosswalks as part of the task analysis process. Individual Soldiers are trained on core values inherent with being Soldiers. However, their leader and tactical training is focused on their contributions to unit readiness and effectiveness since the Army fights as units, not individuals. Therefore, the MTP should be the basis for individual tactical and leader training with a crosswalk from the collective task in the appropriate MTP down to the individual level to determine the appropriate setting for the training to be conducted. Such crosswalks are embedded within ASAT/ATIA and are available to the training developers, unit commanders and SMEs.

Chapter 9 Integration of Lessons Learned

- **9-1. "Filtering" Lessons Learned.** Training developers and managers may receive lessons learned from a variety of official (e.g., Center for Army Lessons Learned) and unofficial [e.g., unit reports from Operation Iraqi Freedom (OIF)] sources. A mechanism is required to ensure that lessons learned are
 - a. Approved by higher headquarters, or support current or in-development doctrine.
- b. Integrated into doctrine (if not already) concurrently with integration into training products and programs.
- c. Integrated in a consistent manner across all appropriate training products and programs. For example, a lesson learned that changes a tank commander's task could impact the 19K10 Soldier's Manual, 19K Basic Noncommissioned Officer's Course (BNCOC), AOB, and even simulations like the Tank Weapons Gunnery Simulation System (TWGSS).

DTDCD is responsible for "filtering" lessons learned and recommending whether they should be integrated into Armor doctrine and training.

- **9-2. Integrating Approved Lessons Learned**. Once DTDCD has approved a lesson learned for integration –
- a. DTDCD integrates the lesson learned into collective/individual task analysis and DTDCD training products like ARTEP MTPs, Soldier's manuals, and TADSS. The change to the task analysis data is immediate, while the lesson learned may not appear in some training products until scheduled updates are done.
- b. DTDCD develops a strategy for integrating the lesson learned into Armor-proponent courses. The strategy specifies all courses where the lesson learned should be integrated and recommendations on how it can be integrated. This strategy is provided to the unit commanders as a recommended action.
- c. Units determine the feasibility of implementing DTDCD's recommendations. They may be unable to implement DTDCD's strategy due to resource constraints. Units may also develop an alternative strategy for integrating the lesson learned. However, if the unit does not integrate the lesson learned at all, then it must provide a rationale to DTDCD.
- 9-3. A Dynamic Process. Since lessons learned can come from a variety of sources, all Armor Center agencies need to play an active role in managing them. For example, if a unit wants to integrate a lesson learned from an OIF report, it should verify with DTDCD that the lesson learned is an approved one. If it is, then DTDCD needs to develop a strategy for all courses, as described earlier.

Chapter 10 Training Strategies

- **10-1. Unit Training Strategies.** DTDCD develops Combined Arms Training Strategies (CATS) in ASAT/ATIA for brigade-and-below organizations. Each CATS specifies:
- a. All missions and supporting critical collective and individual leader tasks for the type unit. The primary source of missions and collective task analysis.
- b. Frequency/interval. The annual frequency of and interval (a specified period of time) between performing repetitions of the task(s) required to establish efficient task performance to standard.
- c. Means, event, and TADSS. These are the training activities that focus on task performance proficiency and identify exactly how each listed task will be trained. Training exercises can be conducted in the field or via live, virtual, or constructive simulation, e.g., simulation networking (SIMNET), close combat tactical trainer (CCTT), etc. The training activity could include, but is not limited to, field training exercises (FTXs), situational training exercises (STXs), combined arms live-fire exercise (CALFEX), command field exercise (CFX), or combination thereof.
- d. Estimated duration. This is the estimated time it will take an average type unit being trained by this training product to complete the training.
- e. Means quality. This rating indicates the potential quality of the training task performance results related to several characteristics of the training means, including the cost and realism of the training.
 - f. Target audience.
 - g. Critical training gates.

The CG approves CATS, which are then forwarded to DCSOPS&T, where they are submitted as part of the Army Training Model approved by the Army G3.

10-2. Individual Training Strategies. Individual training strategies are addressed in the Individual Training Plans for each MOS. As discussed earlier, DTDCD has the lead for ITPs with input from 16th Cavalry Regiment, NCOA, 1st ATB, G4/DRM, DPTMS, and CAPO. Each ITP covers the POM cycle and provides the basis for updates to Systems Training Plans, the Armor Center's TD2 input, and the CG's annual training guidance. The strategies are intended to guide training development and provide resource estimates for long-term planning. Training development execution in a given FY will likely deviate from the strategies in response to higher headquarters directives, implementation of lessons learned, etc.

Chapter 11 System Training Plans (STRAP)

- 11-1. STRAP Components. A STRAP contains the following training information for new equipment:
 - a. System description and target audience.
 - b. Assumptions and training constraints.
 - c. Training concept for Active Component (AC) and Reserve Component (RC).
 - d. Training strategy for AC and RC.
 - e. Training products.
 - f. Training support.
 - g. Post-fielding training effectiveness analysis (PFTEA).
- **11-2. STRAP Responsibilities.** DTDCD has the lead for developing and updating STRAPs for Armor-proponent systems and providing input to non-proponent STRAPs. 16th Cavalry Regiment, NCOA, 1st ATB, CAPO, DPTMS, and G4/DRM review STRAPs and provide input to DTDCD for consolidation.
- 11-3. STRAP Impacts on Courses. If the STRAP requires determination of new resource requirements (e.g., the number of new TADSS required), DTDCD submits a recommended course of action as part of the ITMB process. If the STRAP also requires a change in course content, units submit changes through the ITMB process.
- 11-4. Requesting New Equipment. If an approved ITMB action requires additional equipment, G4/DRM, in coordination with the units and TACOM (provided the Fleet Management Pilot is approved) will develop DA Forms 4610-R for training equipment "owned" by the G4/DRM. Units will develop DA Forms 4610-R for unit owned equipment and submit them to G4/DRM for processing. DTDCD updates any impacted ITPs to reflect training strategy and equipment changes.
- 11-5. STRAP Approval and Distribution. The DTDCD director approves Armor-proponent STRAPs. Distribution include as a minimum the following: HQDA (DAMO-TR), Army Training Support Center (ATSC), user major commands (MACOMS), program executive officer (PEO)/Program Manager (PM)/special task force (STF)/special study group (SSG)/special acquisition team, HQ Army Material Command (AMC), and PEO Simulation, Training, and Instrumentation (STRI). Copies should be provided to all agencies that reviewed the document and other interested training proponents as appropriate. ATSC ensures that a copy of the approved STRAP document is forwarded to the appropriate HQ TRADOC Combat Development POC to incorporate within the capabilities development document (CDD) package.

Chapter 12 Standards in Training Commission (STRAC)

- **12-1. Purpose of STRAC.** The mission of the STRAC committee is to determine the quantities and type of munitions essential for Soldiers, crews and units to attain and sustain weapon proficiency relative to readiness levels making maximum use of TADSS and subcaliber firing. Before July 2004, the focus was on unit training ammunition requirements. However, the mission was subsequently expanded to include institutional training ammunition requirements.
- **12-2. STRAC Responsibilities.** DTDCD has the lead in determining the Armor Center's STRAC input. The unit training ammunition requirements should reflect current and projected Armor-proponent gunnery tables and CATS. Institutional training ammunition requirements should reflect the current POIs and approved ITMB actions to increase institutional ammunition requirements. DTDCD prepares quarterly STRAC submissions for the STRAC Council of Colonels and the Training and Leader General Officer Steering Committee (TLGOSC) and provides copies to 16th Cavalry Regiment, NCOA, 1st ATB, G4/DRM, DPTMS, and CAPO. The DTDCD director approves the Armor Center's STRAC submissions.

Chapter 13

Training Aids, Devices, Simulators, and Simulations (TADSS).

- 13-1. Overview. DTDCD will serve as the executive agent for the US Army Armor Center and School to ensure compliance with TADSS acquisition policy and regulatory guidance by receiving, coordinating, and processing TADSS requirements documentation from initiation through approval.
- **13-2.** New Armor-Proponent TADSS Management (Institutional). The process for identifying the requirements for institutional TADSS and acquiring and fielding them is:
 - a. Units identify and document the need for a new TADSS.
- b. Units develop and submit to DTDCD a justification statement, new TADSS capability requirements, number of systems needed to support training, date the TADSS is needed, training strategy if different from existing POI, and alternative resource being used to accomplish the POI training.
 - c. DTDCD conducts a training analysis and validates the need for a new TADSS.
 - d. Units obtain CG approval through the ITMB process.
 - e. DTDCD prepares, staffs, and submits a CDD to ATSC.
 - f. DTDCD prepares, staffs, and submits the STRAP, if applicable, to ATSC for approval.
 - g. G4/DRM determines budget requirements and establishes budget priorities.
 - h. G4/DRM identifies requirements to be contracted out.
 - i. G4/DRM allocates resources.
- j. G4/DRM develops and submits the full description of the requirement, to include essential characteristics and delivery dates, to the contracting officer/materiel developer.
- k. DTDCD documents the acquisition strategy decisions with G4/DRM, the TRADOC System Manager (TSM), and the PM.
- 1. Directorate of Base Operations Support (DBOS) assesses environmental impact (as required) and provides assessments to DTDCD for inclusion in CDDs.
 - m. DBOS coordinates facilities allocation/upgrade (if required).

- n. ABSO identifies, documents, and submits safety factors, hazards, and precautions to DTDCD for inclusion in CDD.
 - o. ABSO coordinates and resolves training safety issues with training agencies.
 - p. G6 reviews all request to ensure compliance with Information Assurance.
 - q. G6 initiates the certification and accreditation process as required.
 - r. SACG reviews units request and assesses mobilization requirement.
 - s. SACG staffs new TADSS requirements with the National Guard Bureau.
- t. DTDCD coordinates TADSS development milestones with contractor/materiel developer and units.
 - u. DTDCD updates course materials as required.
- v. Units provide SME support to contractor/materiel developer during testing/government acceptance.
- w. DPTMS coordinates delivery/user acceptance with G4/DRM (contractor/materiel developer), DTDCD, and the units.
 - x. DPTMS assists in the fielding of TADSS to the units.
 - y. DPTMS coordinates NET with the PM, contractor/materiel developer and the units.
 - z. TSM coordinates the systems management with PM as required.
 - aa. DPTMS schedules TADSS as required.
- 13-3. Fielded Armor-Proponent TADSS Management (Institutional). The process for managing fielded institutional TADSS is:
- a. Units identify, document and report training, doctrine, technology, and maintenance deficiencies in institutional TADSS to DTDCD and DPTMS.
 - b. DTDCD reviews and verifies the deficiencies.
 - c. DPTMS notifies ATSC of the TADSS deficiencies.

- d. DPTMS reports the TADSS deficiencies to G4/DRM for inclusion in or removal from the Monthly Status Report (MSR).
 - e. G4/DRM report TADSS status on the monthly status report (MSR).
 - f. DPTMS tasks units to provide SME support to materiel developer.
- g. DPTMS coordinates repair/upgrade with units. Unit will provide damage statement, if appropriate.
 - h. DPTMS monitors accountability of TADSS turned in for repair/upgrade.
 - i. DPTMS coordinates NET with units as required.
- **13-4.** Non-Proponent TADSS Management (Institutional). The process for managing non-proponent institutional TADSS is:
 - a. DTDCD reviews and staffs nonproponent CDD/STRAP with units and Armor staff.
 - b. Units review nonproponent CDD/STRAP and provide comments to DTDCD.
- c. G4/DRM, DBOS, G-6, and SACG review the nonproponent CDD and STRAP and provide feedback to DTDCD.
 - d. DTDCD processes course changes through the ITMB.
 - e. If CG approves the course changes, then DTDCD updates course materials.
- f. DTDCD prepares and submits required documentation to TRADOC proponent school as required.
 - g. DPTMS coordinates Fielding Feeder Report data with training agencies.
 - h. DTDCD coordinates fielding with G-3.
 - i. DPTMS fields device to training agencies.
 - i. DPTMS coordinates NET with units.
 - k. DPTMS schedules device usage as required.

Chapter 14 Training Development Support for Operational Testing

14-1. Components of a Training Test Support Package (TTSP).

- a. A TTSP consists of:
 - (1) Training schedule.
 - (2) POI for each affected MOS, officer, warrant officer, and enlisted.
 - (3) List of training devices and embedded training components.
 - (4) Ammunition, targets, and ranges for training.
 - (5) Draft ARTEP mission training plans.
 - (6) Target audience description.
 - (7) Draft Soldier training publications (STPs) or changes.
 - (8) Lesson plans.
 - (9) Critical task list.
- (10) Field manuals (FMs) or changes to FMs (when not provided with the Doctrine and Organization Test Package).
- b. TTSP Responsibilities. DTDCD develops the TTSP or coordinates its development with the appropriate PM. It then staffs the TTSP to 16th Cavalry Regiment, NCOA, 1st ATB, and CAPO for review. The DTDCD director approves the TTSP for the Armor Center.
- c. The Operational Test and Readiness Statement (OTRS). CAPO has the lead on developing a data collection plan, evaluating training, and preparing an OTRS for the CG's signature. The OTRS certifies the readiness of the system for testing in each member's area of responsibility. 16th Cavalry Regiment, NCOA, 1st ATB, and DTDCD may be tasked to support CAPO during the evaluation.

Chapter 15 Unit Training

15-1. DTDCD develops ARTEP MTPs, STPs, tank commander competency test – level II (TCCT-II), scout commander competency test – level II (SCCT-II), and gunnery manuals, which are approved by the DTDCD director. Other units training programs are considered an extension of institutional training. Examples include the Reconnaissance, Surveillance, and Target Acquisition (RSTA) Tactical Leader's Course, Armor Driver Training Programs, the Battle Staff Training System, and "pop-up" Mobile Training Teams. New unit training programs or revisions to existing ones go through the ITMB process. If the ITMB recommends approval and the CG approves, then the unit training program is developed or revised in the same manner as described in Chapter 5, Changes to Existing Courses.

Chapter 16 Training Development Automation

- **16-1. ASAT/ATIA Database.** DTDCD manages the Armor ASAT/ATIA database, which consists of:
- a Coordinating with the Training Development and Delivery Directorate (TDADD), ATSC and PEO on revisions to the database structure.
- b. Setting security access to minimize data corruption (e.g., restrict access to editing BNCOC lesson plans to only NCOA and DTDCD developers working the course).
 - c. Assisting Armor Center users with installing the database client software.
 - d. Providing training and technical support.
 - e. Coordinating with external agencies on remote access to the database.
 - f. Importing and exporting ASAT/ATIA to other agencies.
 - g. Maintaining data support tables, such as courses and references.
 - h. Developing custom database reports (e.g., the task-to-course crosswalk).
- **16-2. ADL Support.** G6 and DTDCD coordinates with PM Distributed Learning System (DLS), ATSC, and PEO STRI on ADL support requirements, to include:
 - a. Learning Management Systems (LMS).
 - b. Collaborative software applications for synchronous ADL.
 - c. Shareable content object reference model (SCORM) standards.
 - d. ADL policies and practices.
- **16-3. Army Knowledge Online (AKO).** G6 assists Armor Center training development personnel in using AKO to staff training products, share information, and collaborate on projects through Knowledge Center Collaboration.
- **16-4.** Automated Instructional Management System (AIMS). CAPO is responsible for the management and installation of AIMS. It also provides training and technical support to Armor Center users.

- **16-5.** Lifelong Learning. DTDCD, G6, and CAPO are the joint leads for TRADOC lifelong learning initiatives, to include:
 - a. G6 provides maintenance and support for the UMW's hardware and software.
 - b. CAPO develops and maintains field reachback programs and surveys.
- c. DTDCD develops and maintains ADL courseware and self-development programs as described in Chapter 6, Advanced Distributive Learning (ADL).

Chapter 17 Training Development Clearinghouse

- **17-1. Training Development Clearinghouse.** DTDCD is the Armor Center clearinghouse for training development actions and policies. The intent is to provide external agencies with a single training development POC. DTDCD's mission includes:
- a. Ensuring actions and policies are sent to the appropriate Armor Center organizations (e.g., resource projections for ACCC revisions would go to 16th Cavalry Regiment and G4/DRM).
- b. If the action requires input from multiple organizations, consolidating input into a single, staffed Armor Center response (e.g., TRADOC wants to know where history classes have been integrated into all Armor POIs).

Chapter 18 Training Developer Education

- **18-1.** Training Developer Definition. For this regulation, a "training developer" is defined as any of the following:
 - a. GS-1750 series, Instructional Systems Specialist.
 - b. GS-1712 series, Training Specialist (Training Developer).
 - c. GS-1702 series, Education and Training Technician.
 - d. GS-1701, ASAT Program Manager.
- e. GS-301 series, Training Simulation Analyst. (Note: 301 is a generic GS job series; only the Training Simulation Analyst is a training developer).
 - f. Military Training Developer (a graduate of the Systems Approach to Training Workshop).

Individuals in each job series must meet different qualifications and possess unique skills. However, they all contribute to the training development process, often working together to produce a single product like a POI.

- **18-2.** Mandatory Training and Education. The units, DTDCD, and CAPO are responsible for ensuring that their training developers are adequately trained.
- * a. All new personnel in the unit, DTDCD, or CAPO, who will work with training materials, must attend the Training Manager Orientation Course (TMOC) at Fort Knox.
- b. Civilian training developers in the 1750, 1712, 1702, and 1701 job series must complete the training requirements in the Training and Warfighting Developments Career Program. A Master Training Plan for each job series is described in the Army Civilian Training, Education, and Development System (ACTEDS) Plan.
- c. Military training developers must complete the Systems Approach to Training Workshop (SATW) taught by the Staff and Faculty Development Division in CAPO.
- d. Senior military managers (major, master sergeant, and above) are strongly encouraged to attend the Senior Training Manager Course taught by DCSOPS&T.

18-3. Continuing Education. CAPO will coordinate monthly training development seminars to share information on new training development methodologies and technologies and to discuss important training development issues.

FOR THE COMMANDER:

CFFICIAL STATES

OFFICIAL: RUSSELL D. GOLD Colonel, GS Chief of Staff

ROBERT L. BROOKS Director, Information Management

DISTRIBUTION:

A

CF:

DCG, USAARMC

Appendix A References

- 1. AR 1-1, Planning, Programming, Budgeting, and Execution System, 30 January 1984.
- 2. AR 70-1, Army Acquisition Policy, 1 May 1997.
- 3. AR 350-1, Army Education and Training, 9 April 2004
- 4. AR 350-10, Management of Army Individual Training Requirements and Resources, 14 September 1990.
- 5. AR 350-38, Training Device Policies and Management, 15 October 1993.
- 6. DA PAM 350-39, Standards in Weapons Training (STRAC), FY03/04.
- 7. TRADOC Reg 25-30, Preparation, Production, and Processing of Armywide Doctrinal and Training Literature (ADTL), 30 May 1990.
- 8. TRADOC Reg 350-6, Enlisted Initial Entry Training Polices and Administration, 15 August 2003.
- 9. TRADOC Reg 350-10, Institutional Leader Training and Education, 12 August 2002.
- 10. TRADOC Reg 350-18, The Army School System (TASS), 26 May 2000.
- 11. TRADOC Reg 350-70, Systems Approach to Training Management, Processes, and Products, 9 March 1999.
- 12. TRADOC Pam 350-70-1, Guide for Developing Collective Training Products, 17 May 2004.
- 13. TRADOC Pam 350-70-4, SAT, Evaluation, 12 January 2004.
- 14. TRADOC Pam 350-70-5, SAT, Testing, 20 August 2004.

- 15. TRADOC Pam 350-70-6, SAT, Analysis, 7 September 2004.
- 16. TRADOC Pam 350-70-8, The Army School System (TASS) Training Requirements Analysis System (TRAS), 1 November 1996.
- 17. FORSCOM/TRADOC Regulation 140-3, United States Army Reserve (USAR) Division (Institutional Training) Training Management and Policies, 8 February 2000.

Appendix B Training Development Functions Matrix

Product	Lead	Dev Support	Staff	Approve	Comments
Individual Training Plan	DTDCD	1 st ATB 16 th Cav NCOA CAPO	DPTMS G4/DRM SACG	CG	
Course Administrative Data	1 st ATB 16 th Cav NCOA	DTDCD CAPO	DPTMS G4/DRM SACG G6	CG	"Lead" means that units initiate the work via an ITMB action. DTDCD staffs each CAD through the appropriate unit to the CG for approval.
Program of Instruction	1 st ATB 16 th Cav NCOA	DTDCD CAPO	DPTMS G4/DRM SACG G6	CG	"Lead" means that units initiate the work via an ITMB action. DTDCD develops/revises staffs each POI through the appropriate unit to the CG for approval.
TD2 Input	DTDCD	16 th Cav NCOA 1 st ATB CAPO G4/DRM		DTDCD	
Lesson plan, tests, supporting materials	1 st ATB 16 th Cav NCOA	DTDCD CAPO	DPTMS ABSO Doctrine Div	1 st ATB 16 th Cav NCOA	"Lead" means that units initiate the work via an ITMB action. DTDCD develops the materials with the unit; the unit commander approves them.
ADL courseware	16 th Cav NCOA 1 st ATB DTDCD ¹	DTDCD CAPO	DPTMS G6 ABSO Doctrine Div SACG	16 th Cav NCOA 1 st ATB COR ²	

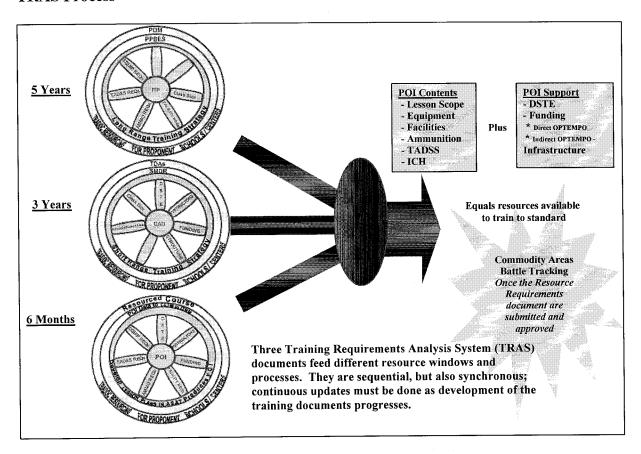
¹ Not all ADL is course-based; DTDCD could submit a proposal to develop an ADL training tool or self-development program.

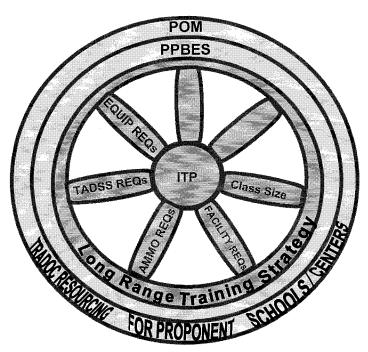
² If the ADL is contracted, then the COR approves contractual work based on content acceptance by the appropriate unit commander and ADL design feedback from DTDCD, CAPO, and G6. For DLXXI ADL contracts, the COR is the Army Training Support Center (ATSC).

Product	Lead	Dev Support	Staff	Approve	Comments
ITMB	DTDCD	16 th Cav NCOA 1 st ATB CAPO DPTMS SACG G4/DRM	ABSO DPTMS G6	CG	
CMF19/BC12 Master Task List	DTDCD		16 th Cav NCOA 1 st ATB CAPO	CG	
Task Review Boards	DTDCD	1 st ATB 16 th Cav NCOA SACG CAPO		DTDCD	
ARTEP Mission Training Plans	DTDCD		DPTMS ABSO	DTDCD	
Soldier Training Publications	DTDCD		16 th Cav NCOA 1 st ATB DPTMS ABSO	DTDCD	
TCCT-II/SCCT-II	DTDCD		ABSO		
Task-to-Course Crosswalk	DTDCD	1 st ATB 16 th Cav NCOA CAPO		DTDCD	
Institutional Training Standardization Reports	DTDCD				
Combined Arms Training Strategies	DTDCD		16 th Cav NCOA 1 st ATB SACG	DTDCD	
System Training Plans	DTDCD	1 st ATB 16 th Cav NCOA		DTDCD	
STRAC	DTDCD	1 st ATB 16 th Cav NCOA		CG	
Unit TADSS	DTDCD	1 st ATB 16 th Cav NCOA		CG	

Product	Lead	Dev Support	Staff	Approve	Comments
Institutional TADSS	DTDCD	1 st ATB 16 th Cav NCOA DPTMS G4/DRM		DTDCD	
TTSP	DTDCD	CAPO		DTDCD	
OTRS	CAPO	DTDCD		CG	
Unit Training Programs	1 st ATB 16 th Cav NCOA	DTDCD CAPO		CG	"Lead" means that units initiate the work via an ITMB action. DTDCD develops the materials with the unit; the unit commander approves them.
ASAT/ATIA	DTDCD				
AKO	G6				
AIMS-PC	1 st ATB 16 th Cav NCOA	CAPO			
TD Policy	DTDCD		1st ATB 16th Cav NCOA CAPO G4/DRM DPTMS ABSO DPTMS G6		
DA Form 4610-R	1 st ATB 16 th Cav NCOA G4/DRM				

Appendix C TRAS Process



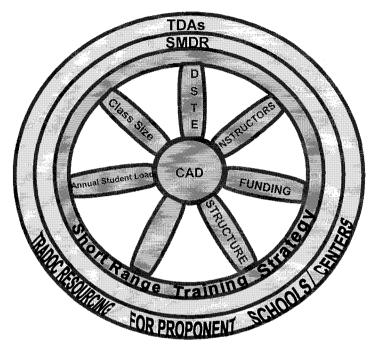


TRAS - Training Requirements Analysis System

- A long and short range planning and management process for the timely development of individual training.
-Integrates the training development process with the Planning, Programming, Budgeting, and Execution System (PPBES) by documenting training strategies, courses, and related resource requirements.

ITP - Individual Training Plan (5 yrs) - Identifies the long range training strategy for an occupational specialty and prescribes the complete individual training requirements (resident and nonresident) for that specialty (19K, 19D, BC19). - Justification for initiating acquisition actions and for developing individual training products.

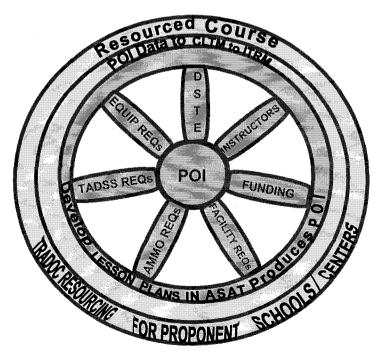
POM – Program Objective Memorandum – Presents the Army's proposal for a balanced allocation of its resources within specified constraints.



CAD - Course Administrative Data (3 yrs). Short-range training strategy that provides critical planning data which enables recruiting, quota management, and personnel systems for students, instructors and direct support to training event (DSTE)

SMDR – Structure Manning Decision Review. The SMDR validates training requirements and reconciles those requirements to an affordable, acceptable, and executable training program.

TRAP – Training Resource Arbitration Panel manages changes to the training program during the execution year.



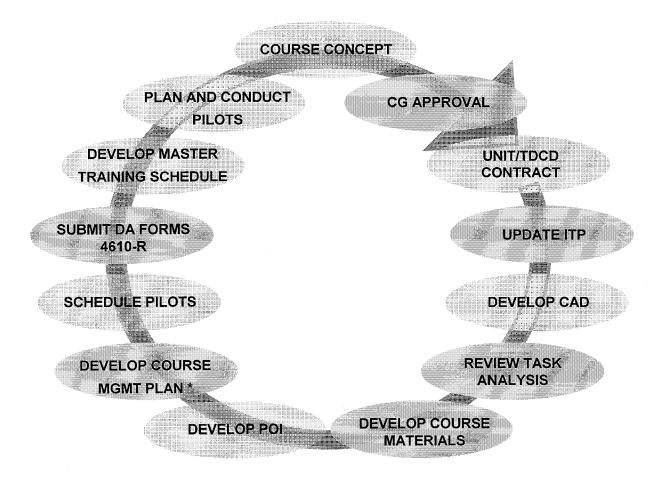
POI - Program of Instruction (6 months) - Proponent approval and submission to TRADOC for validation of previously submitted resource requirements.

ASAT - Automated System
Approach to Training – database
software program for developing
training material.
CLTM - Course Level Training Model

Interface that generates direct
 OPTEMPO requirements from the
 POI data.

ITRM - Institutional Training
Resource Model: ITRM is the pricing
mechanism that leverages training
and resource management
processes at all staff levels. CLTM
requirements working; other
interface models in progress
(Training and Doctrine Development
Management (TD2), Web PC, Special
Items)

Appendix D Development of a New Course



^{*} The Course Management Plan is developed for exported resident courses only.

Appendix E

Sample Memorandum of Agreement for Course Development/Revision

MEMORANDUM OF AGREEMENT BETWEEN

NONCOMMISSIONED OFFICERS ACADEMY (NCOA) AND DIRECTORATE OF TRAINING, DOCTRINE, & COMBAT DEVELOPMENT (DTDCD)

SUBJECT: Revision of Defense Blocks in 19K Advanced Noncommissioned Officers Course (ANCOC)

- 1. Purpose. This memorandum of agreement (MOA) describes the responsibilities between DTDCD and NCOA in updating 39 hours of course materials for 19K ANCOC.
- 2. Scope. DTDCD will revise 35 hours of existing 19K ANCOC course materials and develop four hours of new course materials in the "Defense Block." The course materials will include lesson plans, tests, and, as required, the Course Administrative Data (CAD), Program of Instruction (POI), and 19D Individual Training Plan.
- 3. Understandings, Agreements, Support and Resource Needs.
- a. Using TRADOC's estimated time values, DTDCD projects this course revision will require 410 man-hours. Three additional weeks will be required to provide other agencies with time to review course materials. Two training developers will be assigned to the revision and the work will be completed in 9 weeks. The DTDCD training developers will be John Smith, an instructional systems specialist, and Don Wayne, a training specialist. Mr. Smith and Mr. Wayne will be devoted full-time to this project.
- b. The NCOA lead for this work will be SFC Harry Morgan. He will work closely with the DTDCD training developers during the revisions, ensuring that questions are answered and course materials reviewed within 3 working days. SFC Morgan will recommend course material approval to the NCOA Commandant, who will have approval authority.
- c. Other agencies (e.g., CAPO, SACG, G4/DRM, DPTMS, DPTMS, G6, and ABSO) will provide input to the course revisions as part of a matrix team. All lesson plans will be staffed concurrently with CAPO, DPTMS, ABSO, and Doctrine Division, DTDCD, for 10 working days. No response within that time period will be treated as a concurrence. All feedback will be included with the course materials and provided to the NCOA Commandant as part of the approval packet.

SUBJECT: Revision of Defense Block in 19K Advanced Noncommissioned Officers Course (ANCOC)

- d. DTDCD will ensure that all course materials reflect the latest doctrine, approved lessons learned, and tactics, techniques, and procedures. All course materials will be updated to incorporate the Contemporary Operating Environment (COE).
- e. The attached Course Design Blueprint (see Appendix F), developed by DTDCD and NCOA, describes the following for each lesson plan:
- (1) Tasks taught from the career management field (CMF)19/BC12 Master Task List.
 - (2) Instructional methods and environment.
 - (3) Evaluation methods for practical exercises and test.

The course development work will not deviate from the Course Design Blueprint without approval from the NCOA Commandant and DTDCD Director.

- f. Revision of the 19K ANCOC course materials will begin on 4 October 2004 and end on 7 December 2004. Interim milestones will be:
- (1) 1 October. Kickoff IPR. DTDCD Director and NCOA Commandant approve the Course Design Blueprint and sign the MOA.
- (2) 7 October. DTDCD completes task analysis and doctrine review for the course materials under revision.
- (3) 13 October. DTDCD completes first lesson plan. DTDCD Director and NCOA Commandant must approve it.
- (4) 21 October, IPR #1. DTDCD and NCOA will review first 25% of course material revisions and resolve any issues.
- (5) 4 November, IPR #2. DTDCD and NCOA will review 50% of course material revisions and resolve any issues. DTDCD Director and NCOA Commandant will attend this IPR.
- (6) 18 November, IPR #3. DTDCD and NCOA will review 75% of course material revisions and resolve any issues.

SUBJECT: Revision of Defense Block in 19K Advanced Noncommissioned Officers Course (ANCOC)

- (7) 7 December, Final IPR. DTDCD and NCOA will review all course material revisions. DTDCD Director and NCOA Commandant will attend this IPR. NCOA Commandant accepts all course materials and contract ends.
- g. All work will be completed in the Automated Systems Approach to Training (ASAT) database.
- 4. Effective Date. This MOA becomes effective on the date of the last signature and remains effective until all course materials have been completed.

EDWARD ROBERTS Colonel, Armor Director, DTDCD Fort Knox, KY	WILLIAM WEST CSM, Armor Commandant, NCOA Fort Knox, KY
(Date)	(Date)

Appendix F Sample Course Design Blueprint

Course Design Blueprint for 19K ANCOC Defense Blocks

Lesson	Hrs	Tasks Taught	Instructional	Evaluation
			Strategy	Methods
Conduct Hasty/Deliberate	5	171-121-4045,	Facilitated small	Each student
Occupation of a Platoon		Conduct Troop	group instruction	completes a short
Battle Position		Leading	taught in a	scenario-based PE
:		Procedures at	classroom.	on a terrain board.
		Platoon Level		
			After instructor	
		171-121-4028,	covers	
		Plan Occupation	fundamentals with	
	ŀ	of a Battle	PowerPoint slides	
		Position	and animated	
		171 122 1005	courseware demo, students are	
		171-123-1095,	divided into groups	
·		Prepare an Operation Order	and directed to	
	Į	at Platoon Level	develop a graphic	
		at Flatoon Level	overlay for a	
		171-121-4033,	platoon defensive	
1		Conduct the	position.	
		Occupation of a	Instructor critiques	
		Battle Position at	each group's	
		Platoon Level	overlay for whole	
			class.	
		171-121-4027,		
		Supervise the		
		Improvement of		
		an Armor		
		Platoon's Vehicle		
		Fighting		
		Positions		

Fort Knox Reg 350-2 (16 Dec 04)

Lesson	Hrs	Tasks Taught	Instructional	Evaluation
			Strategy	Methods
Displace to a Subsequent/Supplementary Platoon Battle Position	2	171-121-4016, Conduct a Displacement at Platoon Level	Facilitated small group instruction taught in a classroom.	Each student completes a written, shortanswer PE that requires him to respond to different tactical situations. PEs are graded in class.
Conduct a Perimeter Defense	2	171-123-4012, Establish a Perimeter Defense	Facilitated small group instruction taught in a classroom. After instructor covers fundamentals with PowerPoint slides and animated courseware demo, students are divided into groups and directed to develop a graphic overlay for a perimeter defense. Instructor critiques each group's overlay for whole class.	Each student completes a written, shortanswer PE that requires him to respond to different tactical situations. PEs are graded in class.
Defense Block #1 Exam	11			Each student completes a graphic overlay and then uses it as part of a scenario-based exam on a terrain. Students must react to changing tactical situations throughout the exam.

Fort Knox Reg 350-2 (16 Dec 04)

Lesson	Hrs	Tasks Taught	Instructional	Evaluation
		<u> </u>	Strategy	Methods
Conduct a Platoon Defense	4	171-121-4014, Conduct the Defense of a Battle Position at Platoon Level 171-123-4004, Direct Tank Platoon Fires	Facilitated small group instruction taught in a classroom. After instructor covers fundamentals with PowerPoint slides and animated courseware demo, students are divided into three groups. Each group is given a different tactical situation: an urban area defense, open terrain defense, and defense during limited visibility. Each group analyzes its mission and unique environmental considerations and briefs the other	Each group responds to different tactical situations on a terrain board.
Disengage from the Enemy	3	171-121-4014, Conduct the Defense of a Battle Position at Platoon Level 171-123-4008, Direct a Consolidation and Reorganization at Platoon Level	groups. Facilitated small group instruction taught in a classroom.	Each group responds to different tactical situations on a terrain board.

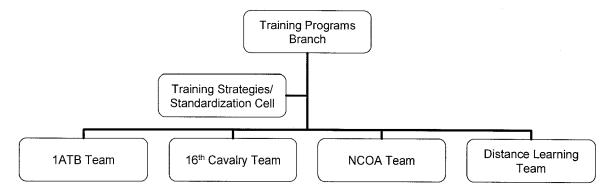
Lesson	Hrs	Tasks Taught	Instructional	Evaluation
			Strategy	Methods
Defense Block #2 Exam	9			Each student
				takes a scenario-
				based exam on a
				terrain board.
				Students must
				react to changing
				tactical situations
				throughout the
				test.
Conduct a Relief in Place	3	171-121-3038,	Facilitated small	Each student
		Conduct a Relief	group instruction	develops a
		in Place at	taught in a	graphic overlay
		Platoon Level	classroom.	for a relief in
				place and
			After instructor	completes a
			covers	written, short-
			fundamentals with	answer PE that
•			PowerPoint slides	requires him to
·			and animated	respond to
			courseware demo,	different tactical
			students are	situations. PEs
			divided into groups	are graded in
			and directed to	class.
			develop an	*
			OPORD and	
			graphic overlay for	
			a relief in place.	
			Instructor critiques	
			each group's	
			overlay for whole	
			class.	

Fort Knox Reg 350-2 (16 Dec 04)

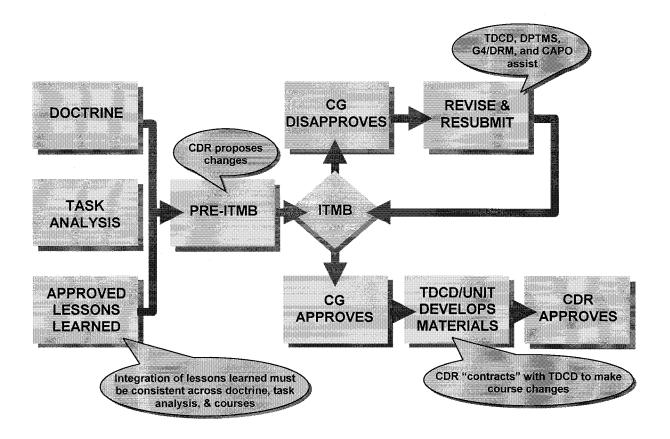
Lesson	Hrs	Tasks Taught	Instructional Strategy	Evaluation Methods
Direct Reaction to an Ambush in Urban Terrain	4	171-337-1018, Direct Reaction to an Ambush In Urban Terrain	Facilitated small group instruction taught in a classroom. Instructor divides class into small groups and directs each group to identify steps a platoon must take in reacting to an urban ambush. Instructor critiques each group's presentation and covers fundamentals with PowerPoint slides, incorporating OIF/OEF examples where	Each student is given an urban area map and a written PE requiring them to identify all potential danger areas on the map, explain why those areas were selected, and describe actions taken if attacked. PEs are graded in class.
Defense Block #3 Exam	6		appropriate.	Each student takes a scenario-based exam on a terrain board. Students must react to changing tactical situations throughout the test.

Appendix G Structure of Training Programs Branch

The Training Programs Branch is part of the Training Development Division, DTDCD. It consists of four teams and an institutional training strategies/standardization cell. Three of the teams will develop CADs, POI, and lesson plans for 1st ATB, 16th Cavalry, and NCOA (see Paragraph 4-4e). The team leader will answer any unit inquiries. Personnel may shift between teams in response to changing training development priorities. However, the team leaders will remain constant and provide training development continuity for the appropriate unit.



Appendix H Institutional Training Management Board (ITMB) Process



Appendix I Pre-ITMB Submission Template

Course:	Organization:
Proposed Action:	
Rationale (include specific references to approetc.):	oved lessons learned, doctrinal changes, surveys

	Currents Resources	Proposed Resources	Difference
Lesson(s)			
ICHs			
DSTE			
OPTEMPO			
Equipment			
TADSS			
Ammunition			
Facilities (ranges,			
training areas)			
Funding	,		

Comments:

Appendix J Acronyms

ABSO Armor Branch Safety Office

AC Active Component

ACCC Armor Captains Career Course

ACTEDS Army Civilian Training, Education, and Development System

ADL advanced distributive learning

AIMS Automated Instructional Management System

AKO Army Knowledge Online AMC Army Material Command

ANCOC Advanced Basic Noncommissioned Officers Course

AOB Armor Officer Basic

ARPRINT Army Program for Individual Training
ASAT Automated Systems Approach to Training

ATB Armor Training Brigade

ATIA Army Training Information Architecture

ATSC Army Training Support Center

ATRRS Army Training Requirements and Resources System

ASIOE associated items of equipment

BNCOC Basic Noncommissioned Officers Course

BOIP basis of issue plan

CAD course administrative data

CALFEX combined arms live-fires exercise

CAPO Cavalry and Armor Proponency Office

CATS combined arms training strategy
CCTT close combat tactical trainer

CDD capabilities development document

CFX command field exercise
CG Commanding General
CMF career management field
CMP course management plan

COC Council of Colonels

COE Contemporary Operating Environment
COR Contracting Office Representative

COTR Contracting Office Technical Representative

CTC

combat training center

DA

Department of the Army

DBOS

Directorate of Base Operations Support

DCSOPS&T

Deputy Chief of Staff for Operations and Training

DCSPER

Deputy Chief of Staff for Personnel

DCSRM

Deputy Chief of Staff for Resource Management

DLS

Distributed Learning System

G4/DRM

Directorate of Resource Management

DOTLMPF

doctrine, organizations, training, leader development, materiel, personnel and

facilities

DPTMS

Directorate of Plans, Training, Mobilization, and Security

DSTE

direct support to training event

DTDCD

Directorate of Training, Doctrine, and Combat Development

ELO

enabling learning objective

ETV

estimated time value

FDCC

Fielded Devices Coordination Council

FM

field manual

FORSCOM

US Army Forces Command

FTX

field training exercise

FY

fiscal year

GS

general schedule

HO

headquarters

HQDA

Headquarters, Department of the Army

ICH

instructor contact hour

IPR

in-progress review

ITMB

Institutional Training Management Board

ITRM

institutional training resource model

ITP

individual training plan

LMS

learning management system

MACOM

major command

MANPRINT Manpower and Personnel Integration

MFAD

Modernization and Functional Automation Division

MNS

mission needs statement

MOA

memorandum of agreement

MOS

military occupational specialty

MSR

monthly status report

MTOE modified table of organization and equipment

MTP mission training plan

NCOA Noncommissioned Officers Academy

NET new equipment training
NGB National Guard Bureau
OCS optimum class size

OIF Operation Iraqi Freedom
OSUT one station unit training

OTRS operational test and readiness statement

PEO program executive officer

PEO STRI Program Executive Office for Simulation, Training, and Instrumentation

PFTEA post-fielding training effectiveness analysis
PM DLS Program Manager Distance Learning Systems

PM program manager POC point of contact

POI program of instruction

POM program objective memorandum

PPBES Planning, Programming, Budgeting, and Execution System

QAO Quality Assurance Office

RATSS Range and Training Scheduling System

RC Reserve Component

RSTA Reconnaissance, Surveillance, and Target Acquisition

SACG Special Assistant to the Commanding General SATW Systems Approach to Training Workshop SCCT-II scout commander competency test – level II shareable content object reference model

SIMNET simulation networking

SMDR structured manning decision review

SME subject matter expert SOW statement of work SSG special study group STF special task force

STP Soldier training publication

STRAC Standards in Training Commission

STRAP system training plan

STRI Simulation, Training, and Instrumentation

STX Situational Training Exercise

TACITS Total Army Centralized Individual Training Survey

TADSS training aids, devices, simulators, and simulations

TASS The Army School System
TATS Total Army Training System

TCCT-II tank commander competency test- - level II

TD2 training and doctrine development
TDA table of distribution and allowances

TDADD Training Development and Delivery Directorate

TEO training and evaluation outline

TLGOSC Training and Leader General Officer Steering Committee

TLO terminal learning objective

TMOC Training Manager Orientation CourseTRAP Training Resources Arbitration PanelTRAS Training Requirements Analysis System

TRM TRADOC Review of Manpower

TSM TRADOC System Manager
TTSP training test support package

TWGSS Tank Weapons Gunnery Simulation System

UFR unfunded requirements

UMW University of Mounted Warfare

USAARMC U.S. Army Armor Center USARC US Army Reserve Command